

Haier SERVICE MANUAL

Order No. FL1004S003V1.1

Front Load Washing Machine

**MODEL: HW60-1201/S/B
HW60-1401/S/B**



WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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Chapter 1 General Information

1-1. General Guidelines

When servicing, observe the original lead dress. If a short circuit is found, replace all parts which are overheated or damaged by the short circuit. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers, shields are properly installed. Confirm that the screws, parts and wiring which were removed in order to service are put in the original positions, or whether there are the portions which are deteriorated around the service places serviced or not. And be sure safety of that.

1-2. Caution and Warning symbols

(You will see them in "Matters needing attention")



Any instructions in this service manual with this "Warning" sign must be followed strictly.



To prevent damage to the washing machine, any instructions in this manual with this "Stop" sign must be followed strictly.

1-3. Function indication symbols

(You will see them in the specification table)



Signify the washing machine has this function.



Signify the washing machine doesn't have this function.

Chapter 2 Product Feature

2-1. Features

(1). 320mm diameter porthole, door may be open at a 175 degrees.

Facilitate view of wash process, facilitate unloading and easy to use with large port.

(2). Class A energy-saving

Scientific design for tub can reduce the use of water heavy during washing, consequently upgrade the energy efficiency class to A, also use scientific washing

(3). Multi-gear speed controller

According to different costuming, you can select corresponding spin speed, from 0 to 1200 rpm.

(4). Unique gasket design featuring no residual water hidden inside.

By the unique gasket, washing machine can left no residual water hidden between outer drum and front board.

(5). Delay time adjustable.

According to different costuming, you can select delay time, from 0.5h to 24h.

2-2. Specification

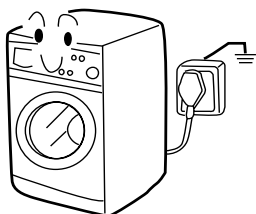
washing machines		HW60-1201/S/B
1. Product identification		
Description of appliance		Washing machine
Type of appliance(FS = standing, BI = built-in)		FS
Supplier own brand		HAIER
Supplier bar code (Europe)	EAN	Supplied by HAIER
Commercial Brand / Model		HAIER
Commercial bar code	EAN	
2. Key-Features		
Energy efficiency class		A
Washing performance class		A
Spin efficiency class		B
Programs	n°	10
Capacity	Kg	6
Spin speed (max.)	rpm	1200
Noise level (sound pressure level)	dB(A)	71.5
Energy consumption per wash circle	kWh	1.2
Water consumption per wash cycle	l	48
Annual average energy consumption *	kWh	187
Annual average water consumption*	l	9204
Residual dampness (spin result)	%	53%
Adjustable thermostat (water temp. adjust from - to)	°C	90 -
Drum capacity dry laundry / water	kg / l	6/48
Auto water level adjust (depending on volume of filled in laundry)	AWL	l
Washing time (max.)	min	196
Washing temperatures (program-controlled)	°C	30/40/ 60 /90
Certification's (CE)		CE
Approvals (VDE/GS / TÜV/GS / IMQ)		CE/VDE
* per average 200 wash cycles (EN50242) T= COLD		
3. Basics data		
Unit dimensions (H x W x D)	mm	850*595*520
Net weight	kg	65
Voltage/frequency	V/Hz	220V-240V~/50Hz
Input power / main fuse (intensity)	W / A	2000/10
Work top / removable		I/I
Control M = electromechanical, E = electronic, F = fuzzy		E
Drum S = stainless steel / Z = zinc coated		S
Tub P = Polyprop./ S = stainless steel		P
Door:		
aesthetic (R = round, Y = big eye, Q = square)		R
Diameter	cm	32
Outer door frame S= stainless steel / M = metal / P = plastic		P
Inner door G= glass / P= plastic		G
Detergent compartments	n°	3
Removable compartment for liquid detergent		-
Delay timer (from - to)	h	0.5-24
Self cleaning suds pump		-
Water inlet hose cold water / hot water		●/-
Water drain hose / -support		●/●
Adjustable feet	n°	4
4. Safety systems		
Auto door lock	ADL	●
Motor overheating protection	MOP	●
No heating without water	NHW	●

	Auto water cool-down (before drain 90°C boiled water)	AWC	●
	Water overflow protection	WRP	●
	Acqua Stop kit		-
	Child protection		●
5.	Programs		
	1) Strong action /cotton cycles (90°C/60°C/40°C/30°C/)	n°	-/●
	2) Normal action / synthetics (90°C/60°C/40°C/30°C/)	n°	●/●
	3) Delicate action / wool or cashmere cycles (60°C/40°C/30°C/)	n°	●/●
	4) Delicates silk (40°C/30°C/)	n°	-
	5) Speedy (40°C/30°C/ , 29min)	n°	●
	6) Sport	n°	●
	7) Hand wash	n°	-
	8) Underwear		-
	9) Jeans		-
	10) Duvet		-
	11) Special programs	n°	2
	Single Rinse	n°	●
	Single Spin	n°	●
	Single Drain		-
	Single Wash		-
	Optional function keys (additional program settings)		
	ON/OFF		●
	Start / Pause		●
	Delay		●
	Extra Rinse		●
	Rinse Hold (or Soak)		-
	Eco Time		-
	Spin Select		●
	Temperature Select		●
	Baby Care		-
	Cold wash		-
	Super Wash		-
	Pre-wash		-
	Easy ironing		-
6.	Packing dimensions & loadability		
	Packing dimensions (H x W x D)	mm	890*650*565
	Gross weight	kg	67
	40' Container load	pcs	162
7.	Logistic / recycling information		
	Packing weight	kg	3
	Packing materials / Recycling symbols		
	Carton (weight)	gr	Shrink package
	Polystyren (weight)	gr	2000
	Polyethylene foil (weight)	gr	500
	Other packing materials (weight)	gr	
	Wood (weight)	kg	500
8.	Service	RS	
	User instruction (languages)		
	Max. failure rate (12 Months after sales to end customer)	%	
9.	Delivery Time of First Batch		Available

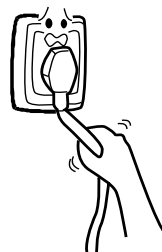
Chapter 3 Matters needing attention

3-1. Safety

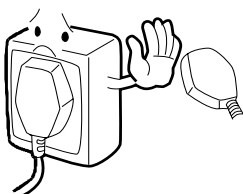
1. A separate earthed socket is required for the power supply. The washing machine must be positioned so that the plug is accessible.



2. Hold the plug and not the electric cable when unplugging the washing machine.



3. Fuses in the power circuit should be rated for 15A. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.



4. Do not touch or use the washing machine barefooted or when the hands or feet are wet.



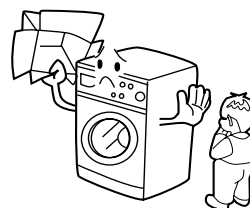
5. Do not use flammable detergent or dry cleaning agent; do not use flammable spray in close vicinity to the washing machine; do not remove or insert the plug in the presence of flammable gas.



6. The door of the washing machine will become hot during the heating process. Avoid contact with the door during the heating process. For safety, keep children away from the washing machine.



7. Keep children away from the packing materials after unpacked.



8.The washing machine should not be installed outdoors or in a damp place. In the event of water leakage or splashes allow the machine to dry naturally.



9.The carpet must not obstruct the ventilation openings in the base of the washing machine.



10.Keep away from heat sources and direct sunlight to prevent plastic and rubber components from aging.



11.During installation, ensure that the electric cable is not trapped by the washing machine and avoid damage to the electric cable.

Dear customer, For the machine and you own security, DO NOT REPAIR IT BY YOURSELF! DO NOT USE THE WASHING MACHINE WHICH SOME PARTS ARE LOST!



3-2. During Use

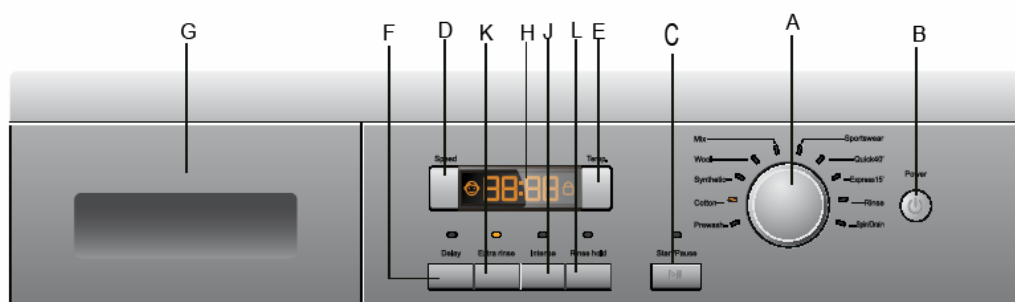
1. Before use, check the joints of the filling hose, the tap and the drainage hose for possible problems from water pressure fluctuations. If joints are loose or there is leakage, turn off the tap and repair. Do not use the washing machine until the hoses are properly fixed.



2.Keep the door slightly open when the washing machine is not in use to prevent formation of odors; do not cover the washing machine with plastic cover so that inside dampness cannot be kept in.



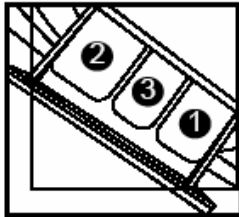
Chapter 4 Operational Guidance



A	Program knob	G	Detergent distribution drawer
B	Power Switch	H	Display
C	Start/Pause button	J	Intense button
D	Spinning Speed Setting button	K	Extra rinse button
E	Washing temperature button	L	Rinse hold
F	Delay Button		

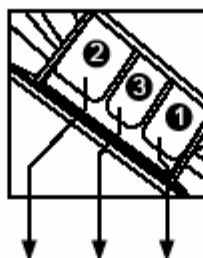
OPERATIONAL FUNCTIONS

A	→ Program knob	By turning the knob clockwise/counterclockwise, the required program can be selected. There are 10 programs available. After a program is selected, the corresponding light will go on.
B	→ Power Switch	Press this button to switch on the washing machine. Press it again to switch it off. Press this button gently for 2 seconds to switch off the machine as buttons are soft touch sensitive.
C	→ Start/Pause Button	When the washing machine is connected to the power socket and a program is selected, lightly touch this button to start operation. During a wash cycle, touch it lightly, operation will stop and the digits on the screen start blinking. Touch it again to resume operation. To cancel a wash program during a wash cycle, touch this button, when the digits on the screen start blinking, press the Power switch, the program will be cancelled.
D	→ Spinning Speed Setting Button	Touch this button lightly to select the desired speed. When a speed is set, it will be displayed on the display screen. Note: Different water temperatures and spinning speeds can be set for different laundries. Wash using the default settings if there is no special requirement.
E	→ Washing temperature button	Touch this button lightly, the washing temperature will be displayed on the display screen. Select a temperature according to the type of laundry.

F	→Delay Button	<p>Touch this button lightly, the washing machine will start operation after a period of time and the corresponding indicator will go on. The range is 0.5-24 hours; each touch of this button increases a half hour. After the button is set, press the Start/Pause button to start countdown of the set time (the time is displayed on the screen until the program ends).</p> <p>Note:The delay time must be longer than the program time;otherwise,the washing machine will start the wash program directly.</p>
G	→ Detergent distribution drawer	<p>__Open the drawer, three compartments can be seen:</p> <p>Compartment 1: Prewash detergent</p> <p>Compartment 2: Detergent for programs 1 to 8.</p> <p>Compartment 3: Softener, conditioning agent, perfume, etc.</p> 
H	→Display	<p>__Information as remaining wash time and error messages will be shown here.</p> <p>Note: After power is switched on, the display will go on and the remaining wash time decreases. As the water pressure and temperature may differ, the remaining time maybe adjusted accordingly. When the laundry is not balanced during spinning, the time may be automatically prolonged. These are normal phenomena.</p>
J	Intense button	<p>If the laundry is heavily soiled, press this button before starting the program. When the button is pressed, the washing time increases.</p>
K	Extra rinse button	<p>Press this button, the washing machine will perform additional rinses. Press the button once to select one additional rinse. The display will show "P-1". Press the button repeatedly and the screen will display "P-2" or "P-3", indicating two or three additional selected rinses. The "extra rinse light" is activated and flashes during the performance. "P-1/2/3" is displayed alternating with the remaining time. The light turns off and the display disappears when the extra rinse ends.</p> <p>Note:Select this function when programe 1-9 is selected.</p>
L	Rinse hold	<p>Touch this button lightly,the indicator will go on.When the washing machine is at the last rinsing operation,it will not drain but to start a soaking cycle.If you want to spin the laundry,press this button or the "start/pause"button again,the indicator will go off and operation will resume.</p> <p>Note:Select this function when "Prewash,Cotton,Synthetic,Wool,Mix,Sport"Programmes are selected.</p>

Chapter 5 Program Introduction

PROGRAM MODES



- 1 Detergent compartment for prewash mode
- 2 Detergent compartment
- 3 Compartment for softener and other additives

								Preset spin speed	
								HW80-1401/S/B	HW60/70-1401/S/B
								HW80-1201/S/B	HW60/70-1201/S/B
								HW80-1001/S/B	HW60/70-1001/S/B
Program		Temperature Maximum	Preset	2	3	1	Recommended Laundry		
1	↪ Prewash	-- to 90 °C	40°C	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Heavy soiling	1000rpm	1000rpm
2	↪ Cotton	-- to 90 °C	40°C	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Cotton fabrics	1000rpm	1000rpm
3	↪ Synthetic	-- to 60 °C	40°C	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Cotton or synthetic	1000rpm	1000rpm
4	↪ Wool	-- to 40 °C	--°C	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Woolen fabrics	600rpm	600rpm
5	↪ Mix	-- to 60 °C	30°C	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Different materials	1000rpm	1000rpm
6	↪ Sport	-- to 40 °C	30°C	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sports wear	1000rpm	1000rpm
7	↪ Quick	-- to 40 °C	--°C	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Slight-soil cotton, linen and synthetic fabrics	1000rpm	1000rpm
8	↪ Express15	-- to 30 °C	--°C	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fast colour synthetic	800rpm	800rpm
9	↪ Rinse	--	--°C	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	/	1000rpm	1000rpm
10	↪ Spin/Drain	--	--°C	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	/	1000rpm	1000rpm

☒ Yes

☒ No

☐ Optional

Chapter 6 Washing Methods

6-1. Loading

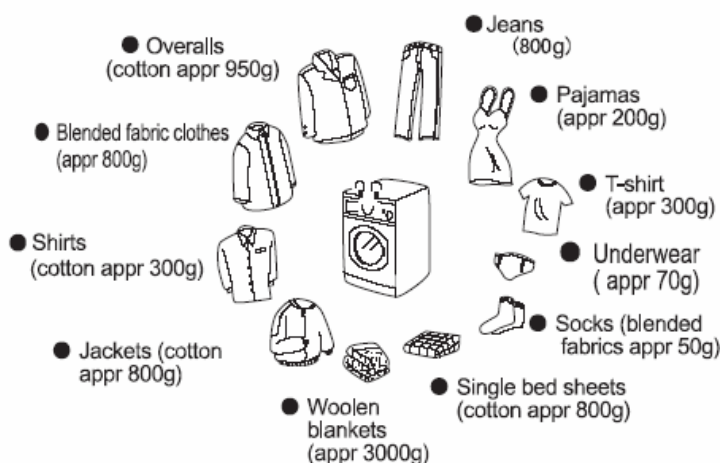
Open the door, put in the laundry piece by piece and then tightly close the door.

Notes:

- 1) When first using the washing machine, let it run unloaded for one program to prevent the laundry from being tainted by oil or dirty water from the washing machine.
- 2) Do not overload the washing machine.



Load Reference

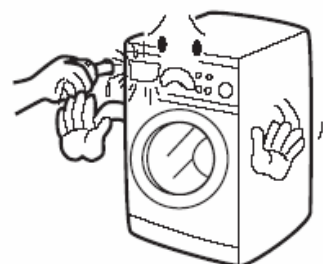


6-2. Adding detergent

Slide out the detergent drawer and put the required detergent and softening agent into the corresponding boxes. Push back the drawer gently.

Caution:

- 1) Do not add liquid detergent to compartment 1 and 2.
- 2) For prewashing program, detergent should be added to both compartments 1 and 2. For other programs, do not add detergent to compartment 1.
- 3) Do not overuse softener; otherwise, it will damage the artificial fibers.

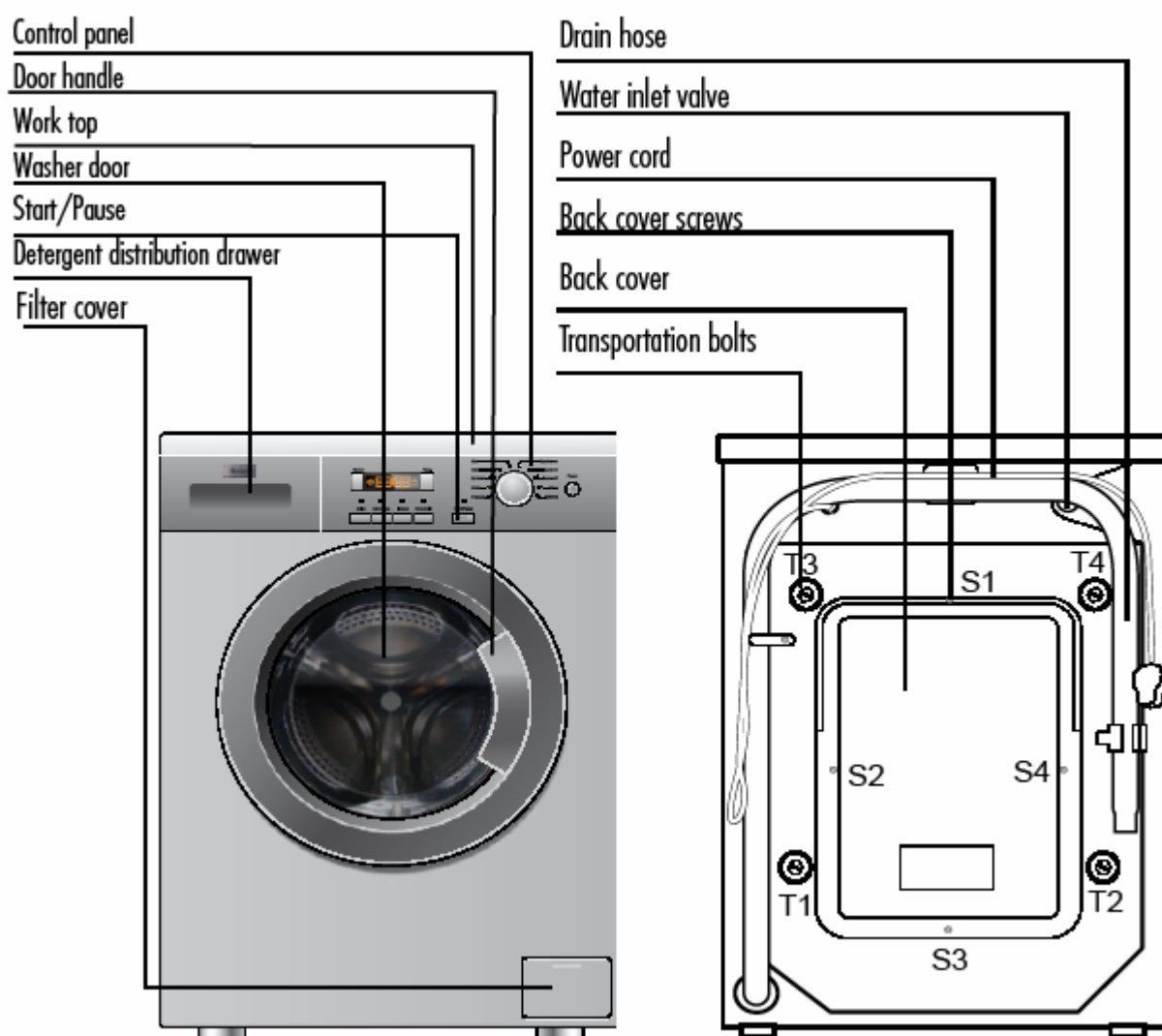


6-3. Selecting washing program

To get the best washing effect, an appropriate washing program should be selected according to the laundry type.

Chapter 7 Appearance brief introduction

7-1. Name of parts



7-2. Net dimension



height:850mm / width:595mm / depth:520mm

Chapter 8 Disassembly and Installation

8-1. Remove packing materials

Remove all the packing materials (including the foam base) to prevent vibration during use, as shown in Fig. 1.

Upon opening of the package, water drops may be seen on the plastic bag and the porthole. This is normal phenomenon resulting from water test in the factory

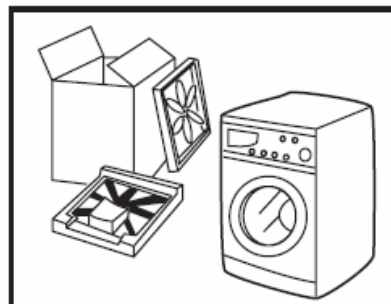


Fig.1

8-2. Dismantle packing bolts

- Dismantle the packing bolts as shown in Fig. 2. The packing bolts are designed for clamping anti-vibration components inside of the washing machine during the transportation process. Before use:

1. Remove the back plate;
2. Remove the four packing bolts on the back plate and take out the rubber hose;
3. Replace the back plate;
4. Fill the holes left by the packing bolts with plastic plugs.

(Attention: The packing bolts and rubber hose should be kept in a safe place for later use)

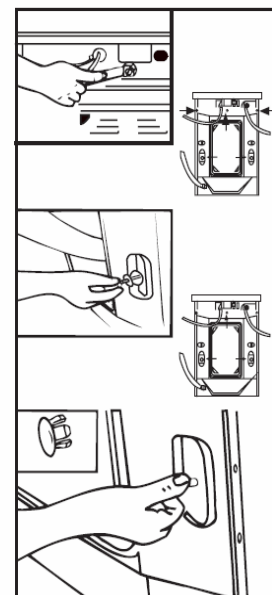


Fig. 2

8-3. Adjusting the washing machine

There are adjustable feet under the bottom of the washing machine. Before use, the washing machine should be adjusted, as shown in Fig. 3, so that it is level.

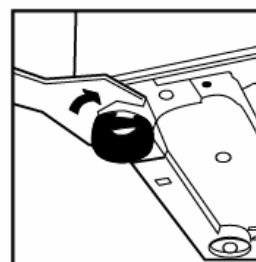
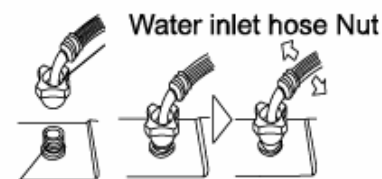


Fig.3

8-4. Joining the Inlet Hose to the Washing Machine

1. Connect the nut on the inlet hose to the connector on the water valve.
2. Tighten the nut to secure the hose.



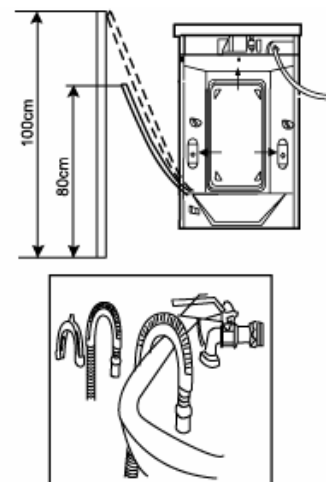
Connect of water inlet valve

8-5. Drainage Hose

The height of the drainage outlet must be 80-100 cm. To prevent the drainage hose from dropping off, fix it to the drainage hose clip at the back of the washing machine.

Use the drainage holder to keep the end of the drainage hose retained and to prevent the outflow of water. It is recommended that the length of the drainage hose not be increase ; if an extension is needed, please consult a serviceman. The additional hose should be no more than 250cm (overextended hoses could lead to siphonage).

Note: The drainage hose should not be submerged in water and should be securely fixed and leak-free. When the drainpipe is placed on the ground or the height of the pipe end is less than 80cm, the washing machine will drain while being filled.



8-6. Connecting to the Power Supply

Before connecting to the power supply, check:

The socket is adequate for the maximum power of the washing machine (For safety, fuses in the power circuit should be rated for no less than 15A).

The voltage should meet the requirement.

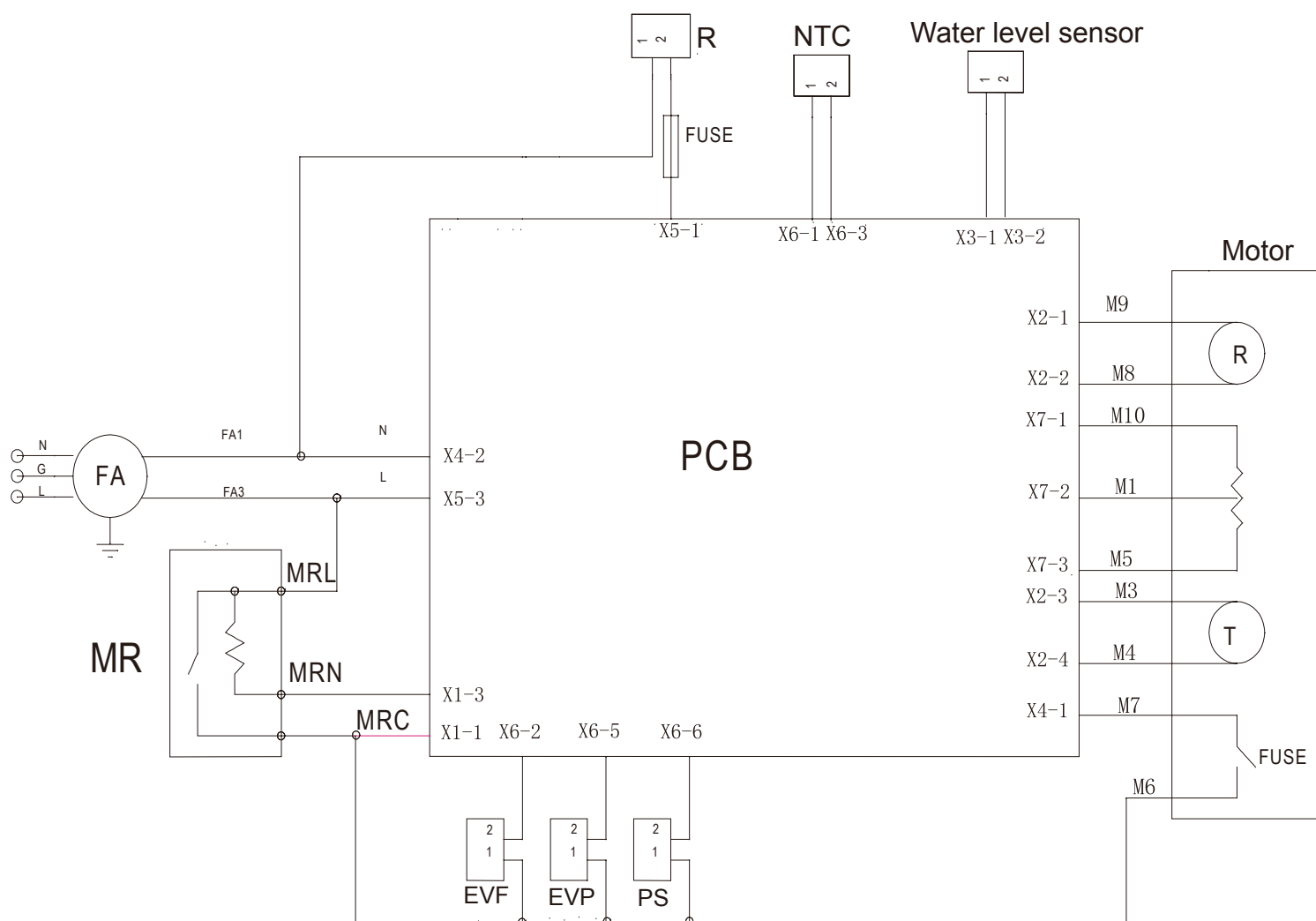
The power supply socket and the plug of the washing machine should be compatible. if they are not compatible Refer to a washing machine technician or a Haier designated service point for power cable replacement. The washing machine should be connected to the earth before use.

Supplementary earth cable should not be necessary if the socket is connected to the earth.

Supplementary earth cable should be installed on the upper back of the washing machine and connected to an earth if the power supply socket has no earth connection.

Chapter 9 Wiring circuit and Self check

9-1. Wiring circuit



9-2. Self check

Self check

1. How to start

Press the "Delay" and "intense" button at the same time, then plug on the machine, "tEst" and the model No will be displayed by turn.

Press "start" button, the machine will start a self test program. At first, the model of the machine will be displayed, then the following will be performed.

2. Test item

- 1) When the door switch is closed for three seconds, 88:88 will be displayed. Otherwise "Err1" will be displayed
- 2) when the main wash valve allows water to let in for 3 seconds, when the prewash valve allows water to let in for 3 seconds, When the hot water valve allows water to let in for 3seconds, when the water valve allows water to let in for 3 seconds, come into next water level, 77:77 will be displayed, If the water can not reach the level in 2 minutes, "Err5" will be displayed. If the water exceeds the overflow level, "Err8" will also be displayed.
- 3) When the washing machine heats water for 10 seconds, 66:66 will be displayed.
- 4) When the washing machine drains for 2 minutes, if no water left, 55:55 will be displayed. Otherwise "Err2" will be displayed.
- 5) When the inner drum runs for ten seconds with the speed of 400rpm at this time and for ten seconds with the speeds of 800rpm 44:44 will be displayed.

When the self check program is completed, "End" will be displayed.

Model selection

When the display board (on the control panel) is replaced technician need to select the correct model according with the model name on the washing machine.

1. Press the "extra rinse" button and then plug on the machine at the same time, keep extra rinse button pressed for 4 seconds. Then "1260" will be displayed on the screen
2. Press the "speed" button to choose correct speed. 1660/1460/1260/1060 will be displayed by turn. Then press "rinse hold" button to choose correct model 1280/1270/1260/1250. Choose 1260 then press the "temperature" button to save. Take model HW60-1201 for example, the spin speed is 1200, the capacity is 6kg. So press "speed" button to choose 1260, and then press "rinse hold" button to choose 1260. You can find other model in the table below.
3. If you want to change the model again after storage, you can cut off the NTC and do the cycle adjustment.
- 4.

Spin speed Capacity	1600	1400	1200	1000
8KG	/	1480	1280	1080
7KG	1670	1470	1270	1070
6KG	1660	1460	1260	1060
5KG	/	/	1250	1050

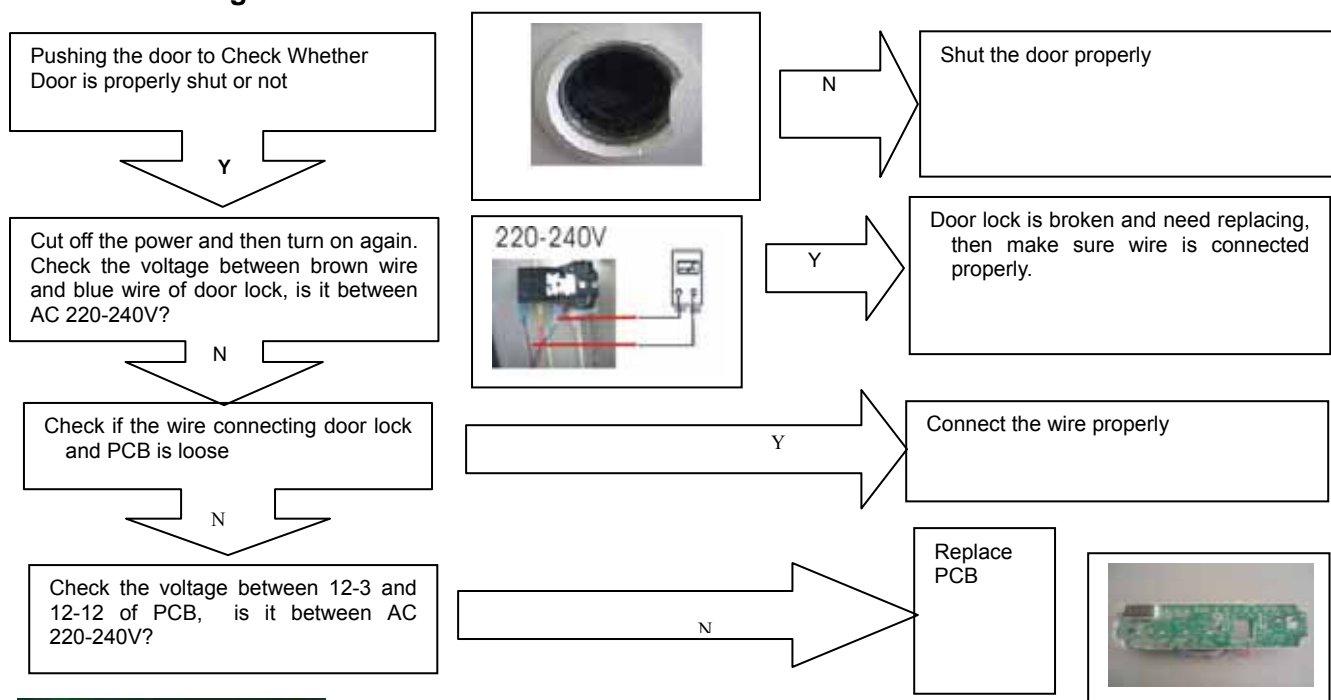
Chapter 10 Error Display and troubleshooting

10-1. Error Display



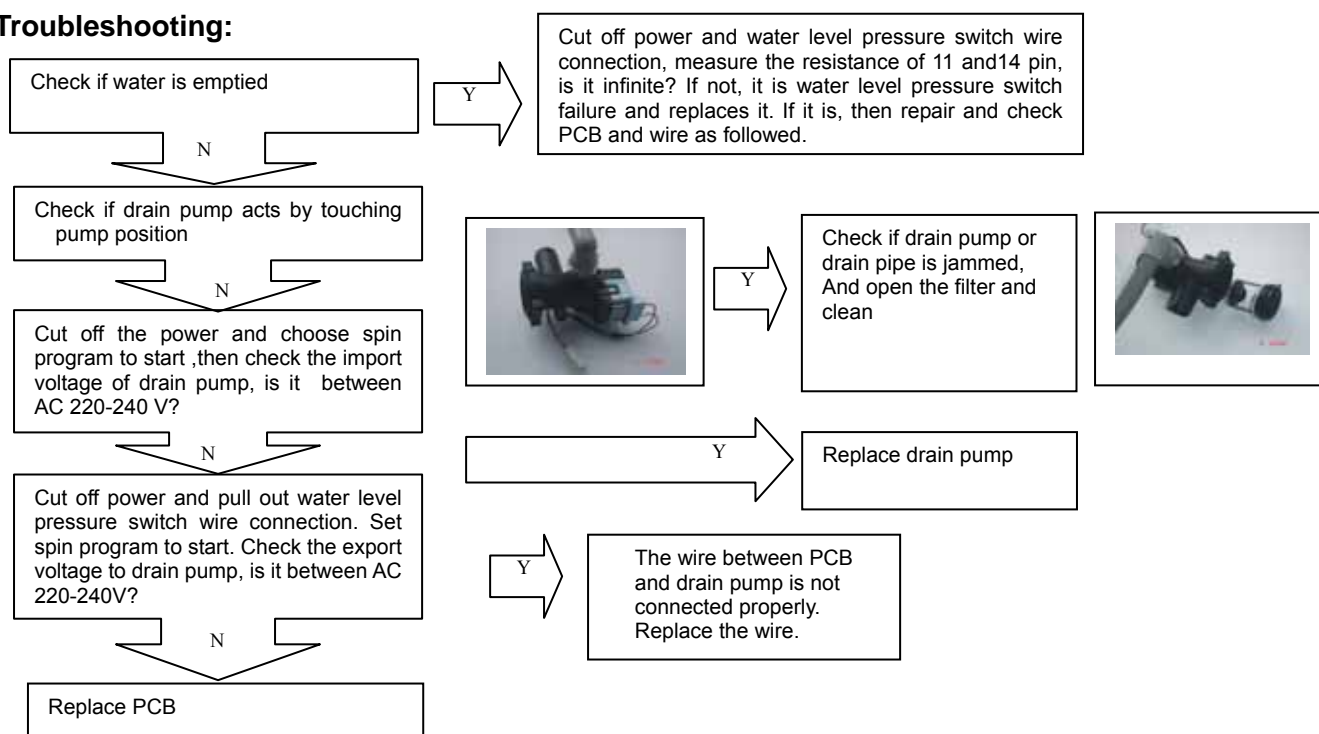
Error message: Door is not properly shut 20s after program is started.

Troubleshooting:



Error message: Drainage error, water not emptied within 4 min.

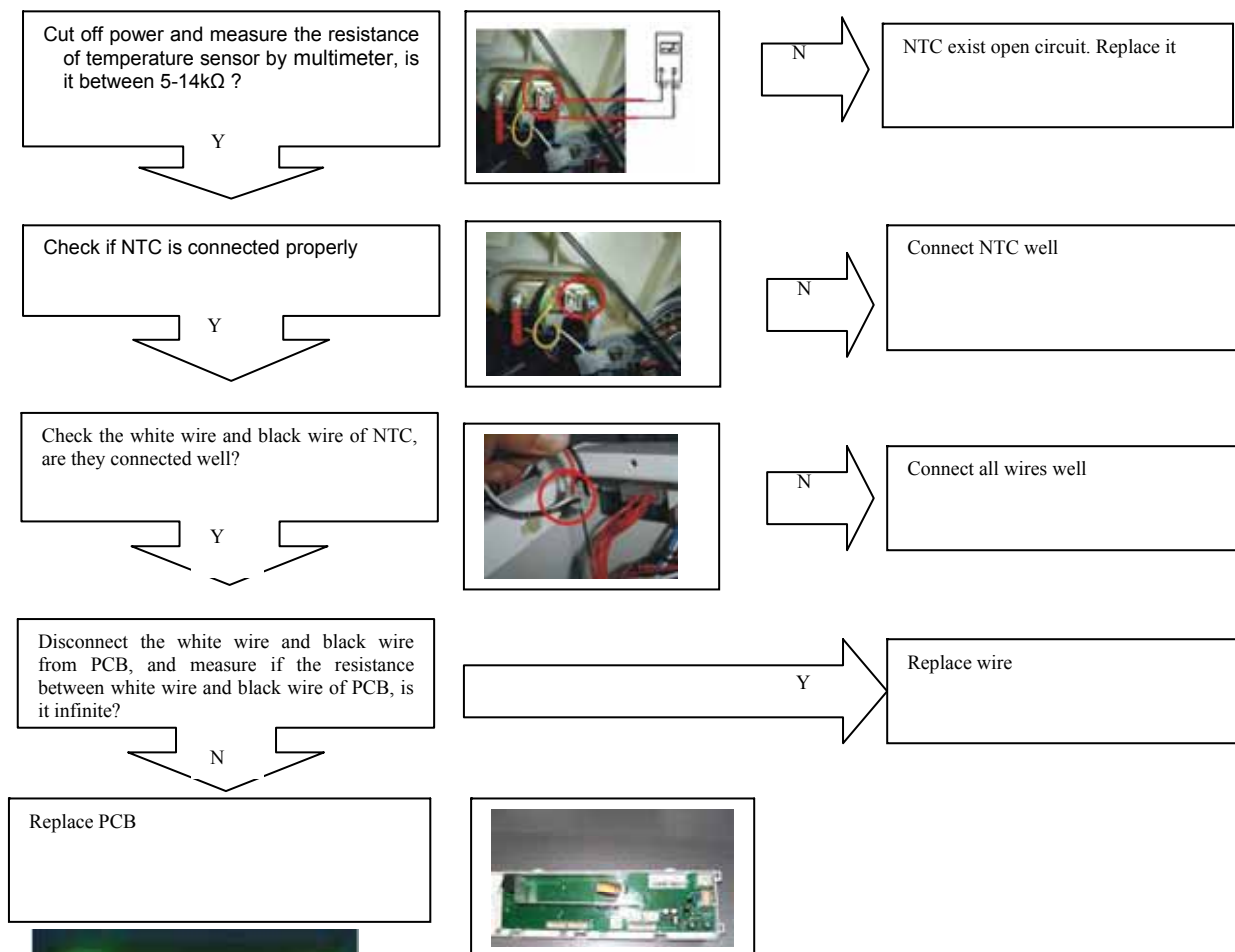
Troubleshooting:





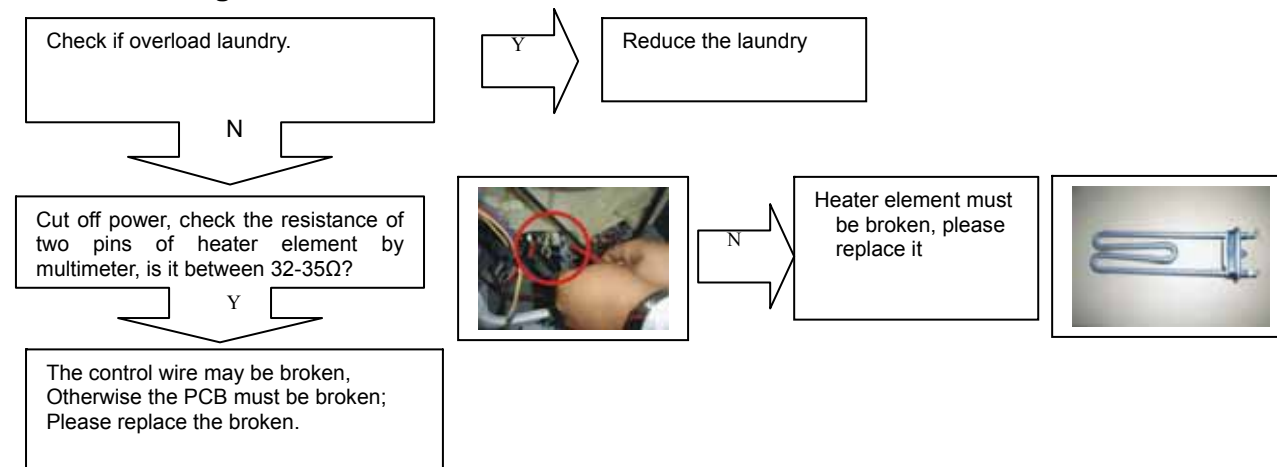
Error message: Temperature sensor is not properly connected or damaged

Troubleshooting:



Error message: The heater may be broken

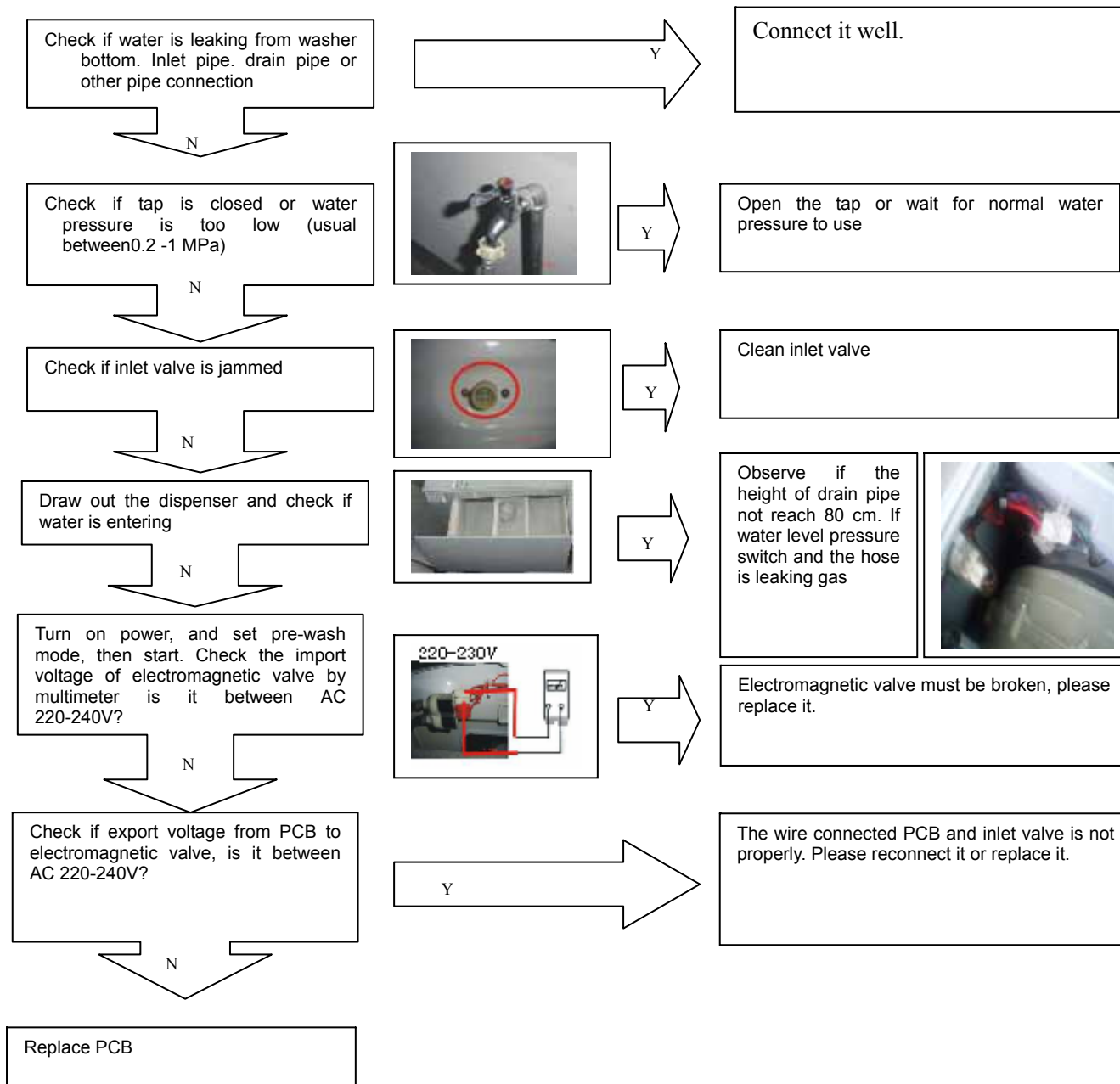
Troubleshooting:





Error message: The required water level is not reached within 6 min

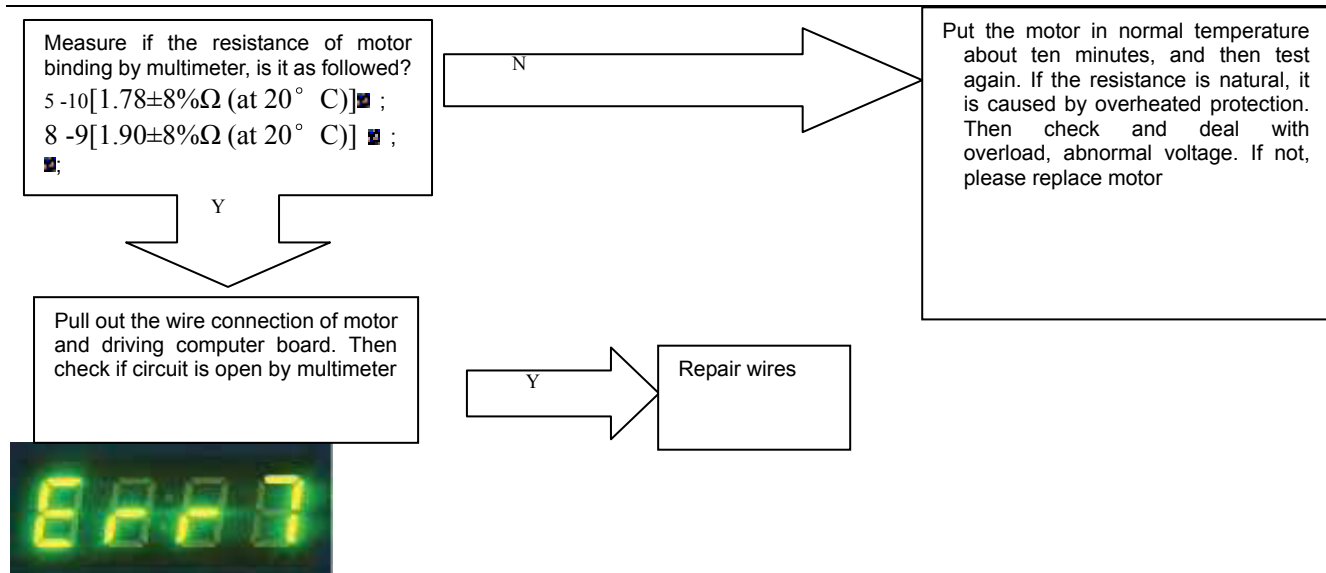
Troubleshooting:



Error message. Motor overheat protection or is damaged.

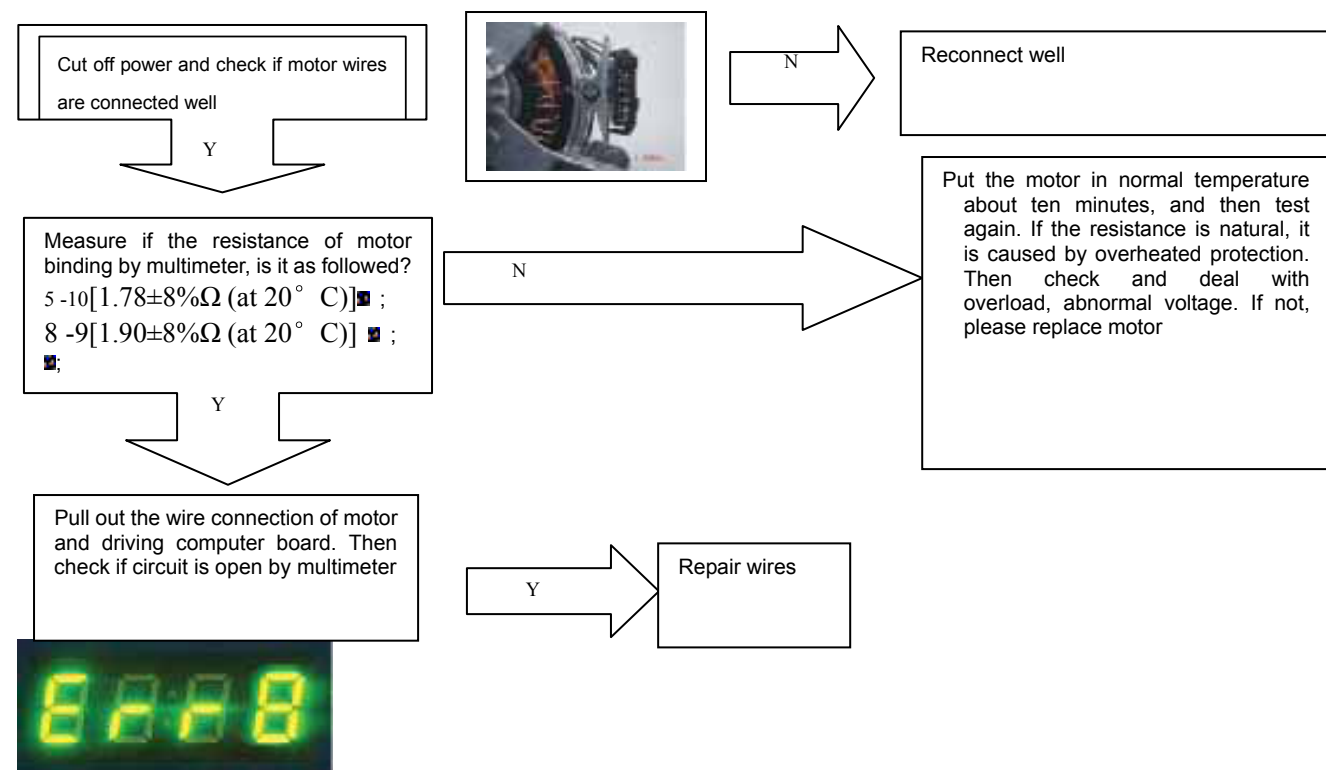
Troubleshooting:





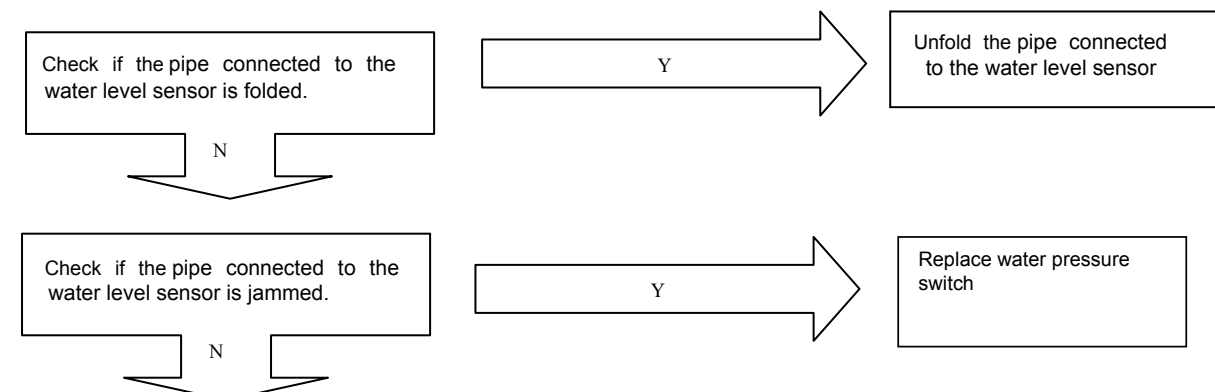
Error message. Motor overheat protection or is damaged.

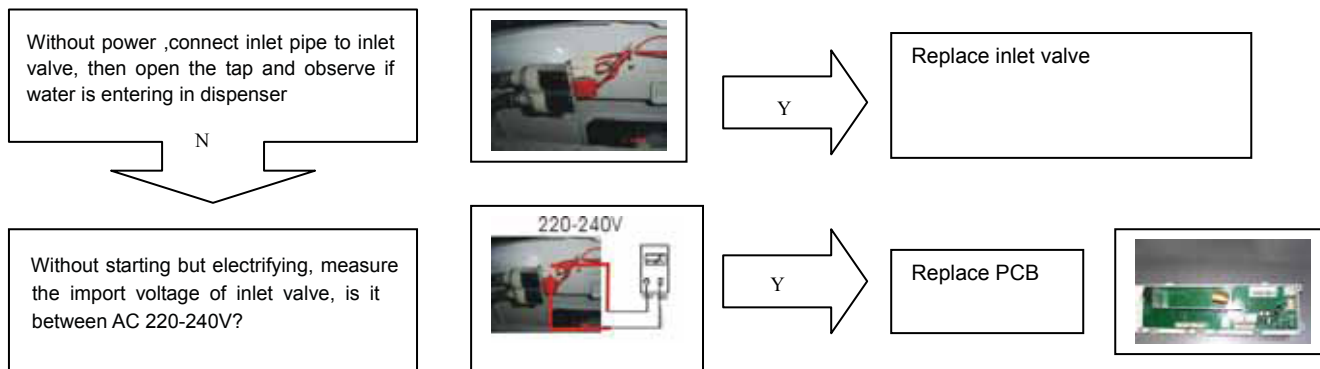
Troubleshooting:



Error message. Water level exceeds protection value.

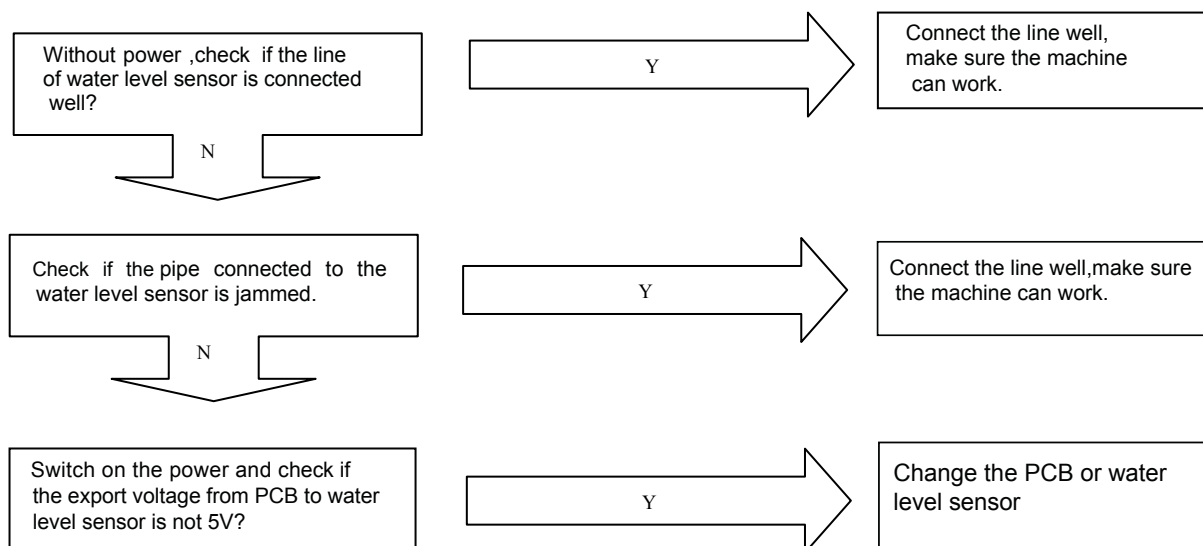
Troubleshooting:





Error message:Water level sensor is unnormal.

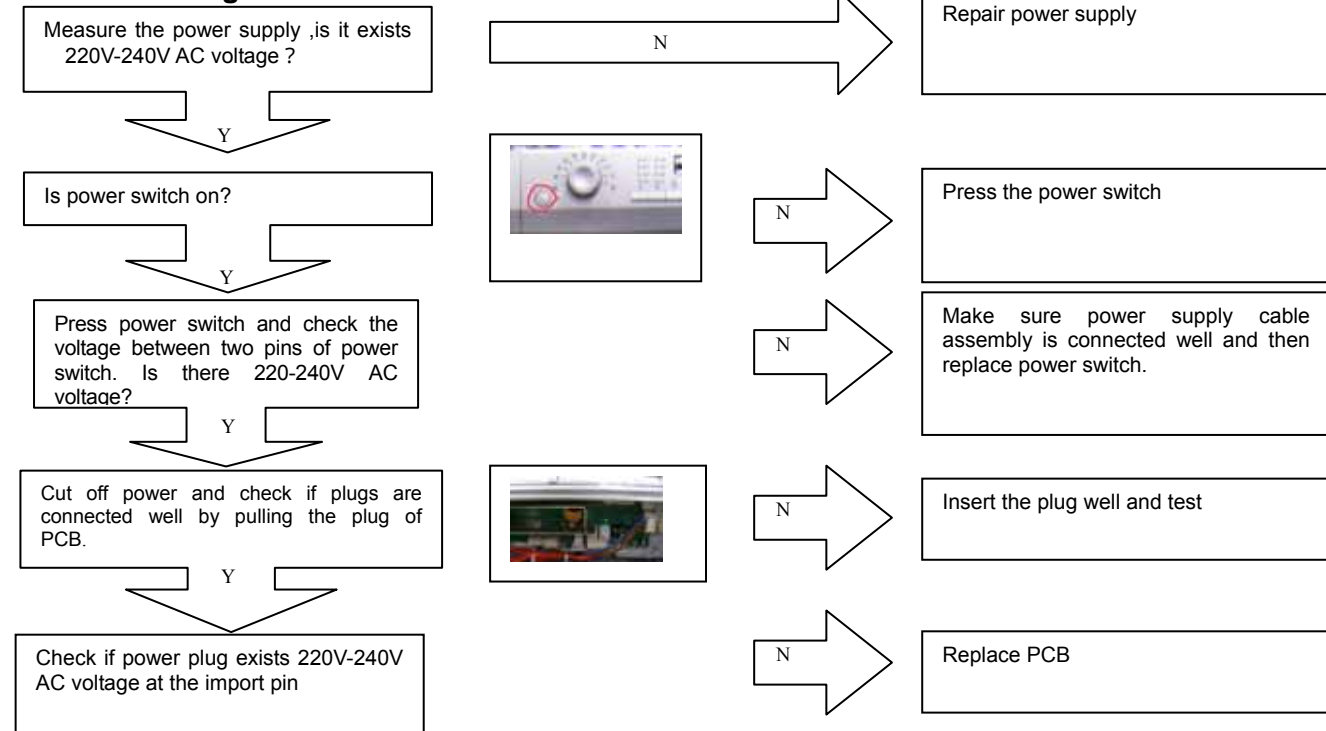
Troubleshooting:



10-2. Examination & Troubleshooting

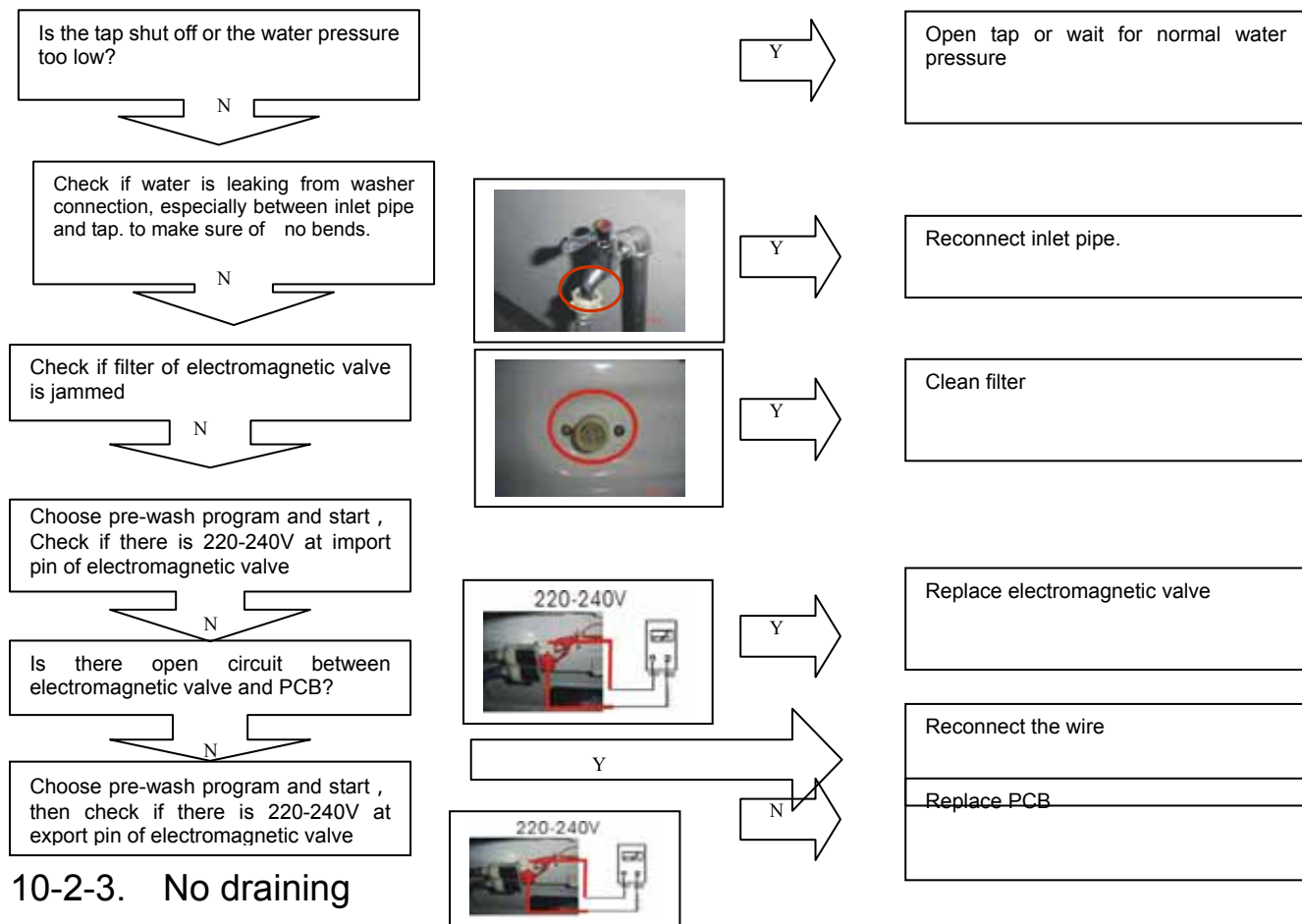
10-2-1. Display nothing

Troubleshooting:



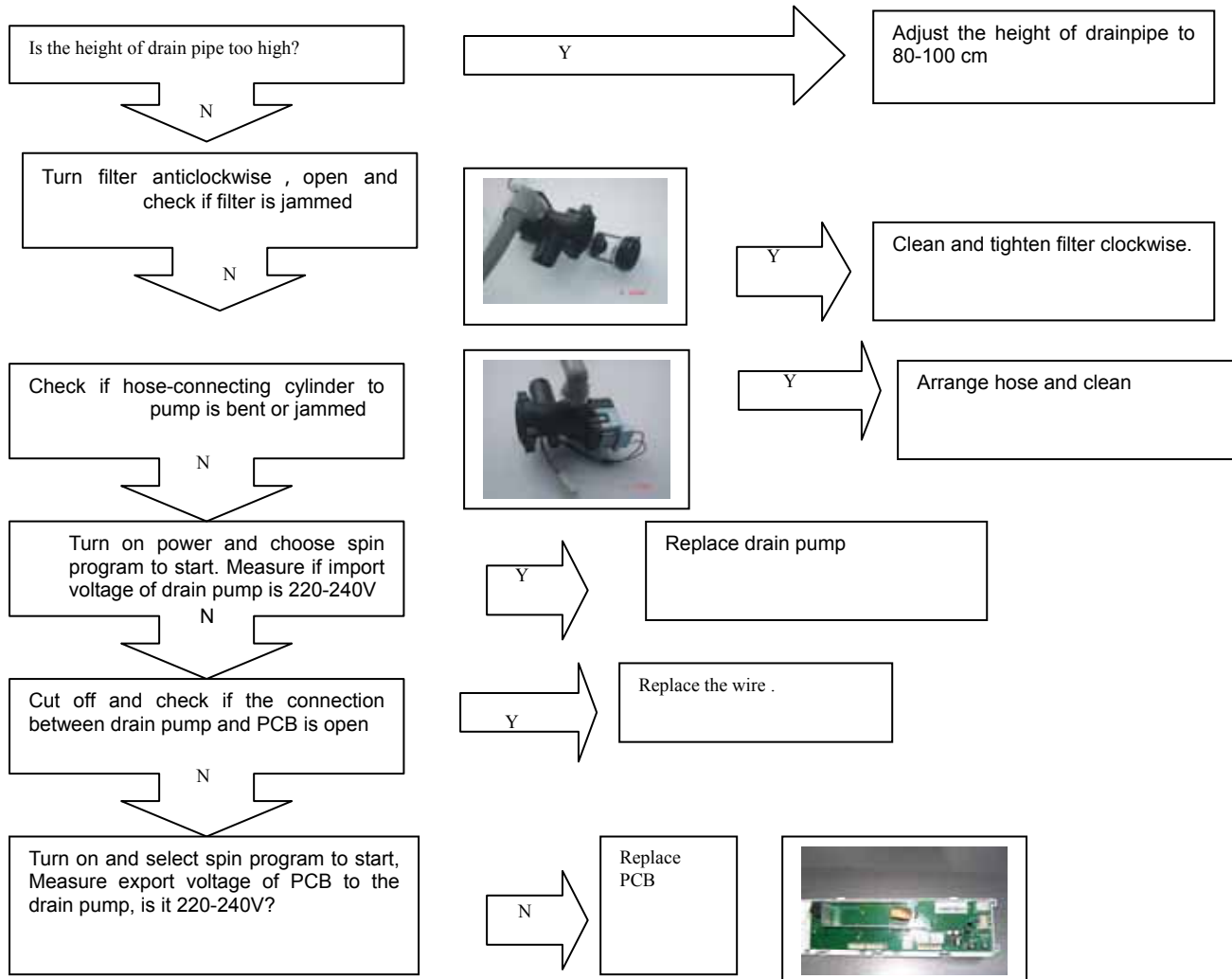
10-2-2. No water inletting

Troubleshooting:



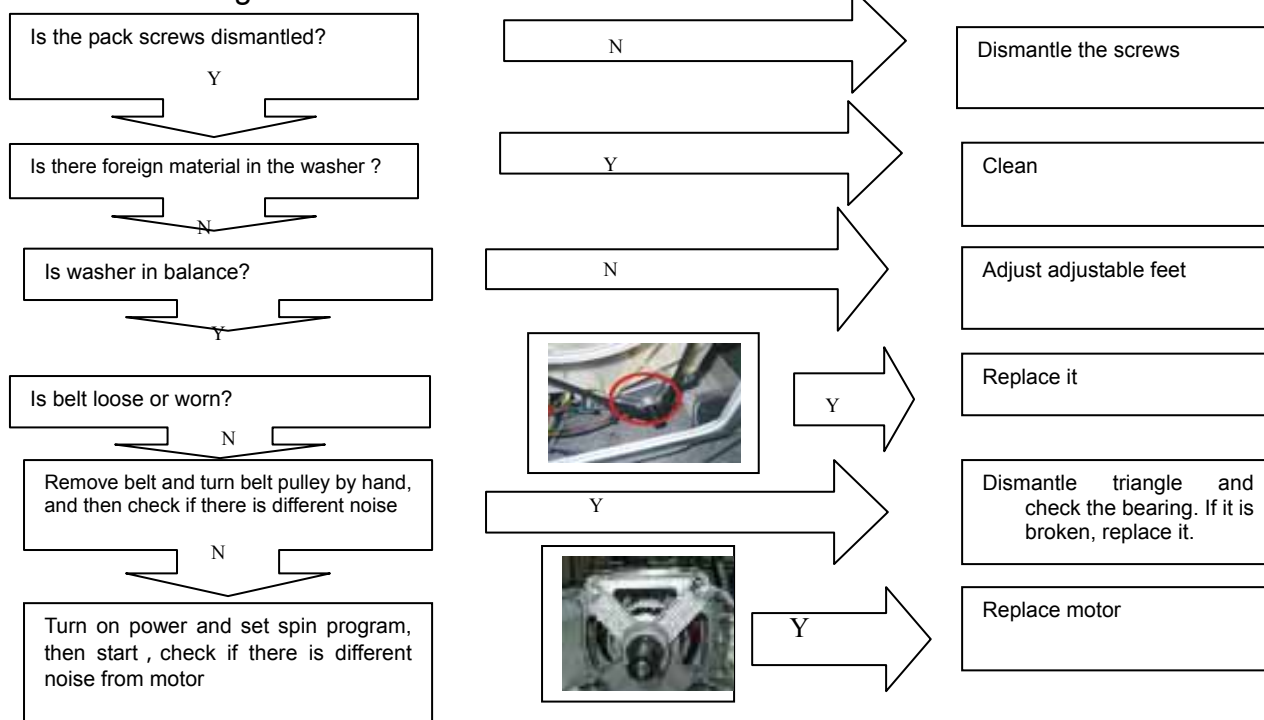
10-2-3. No draining

Troubleshooting:



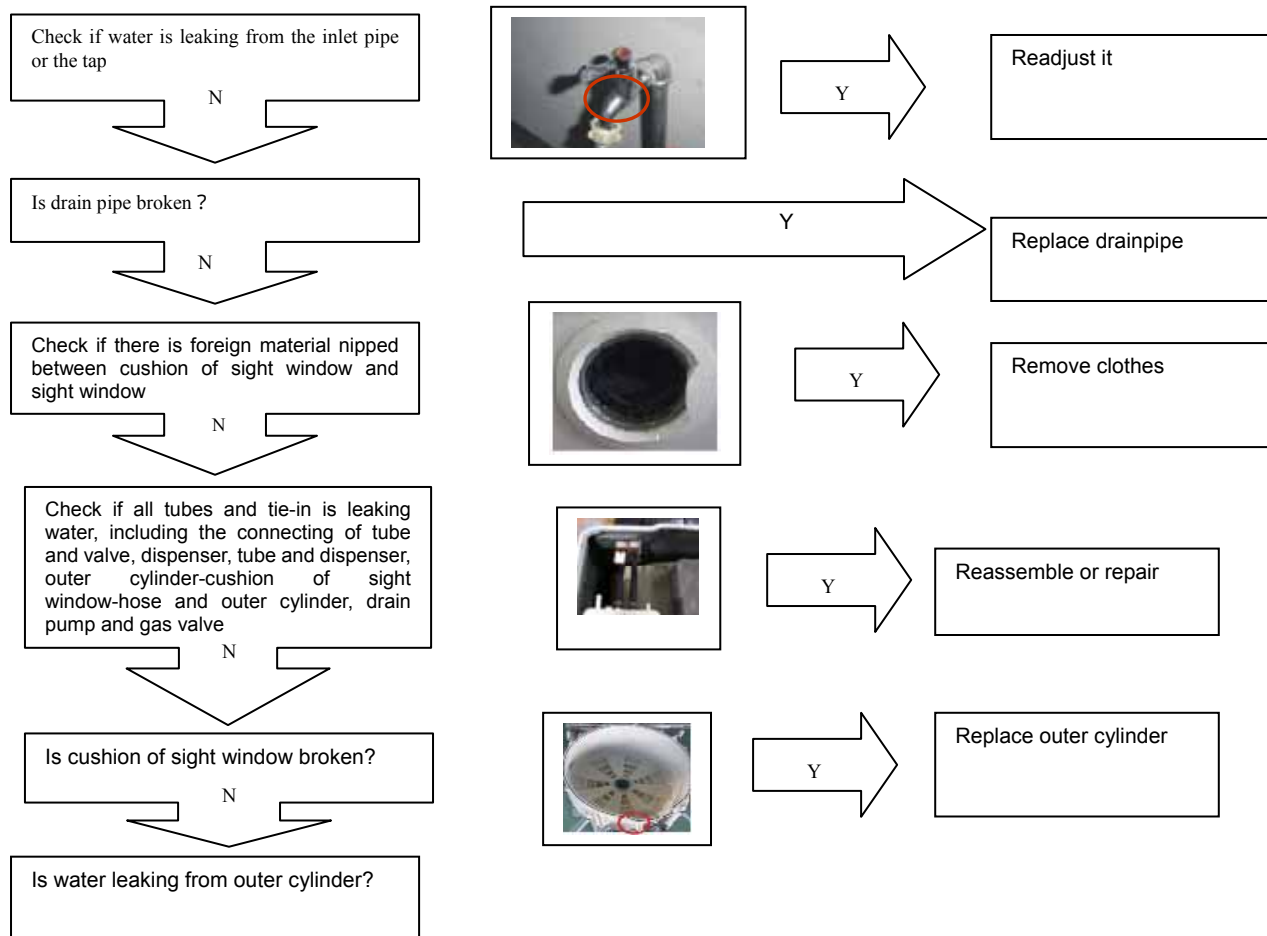
10-2-4. Abnormal noise and vibration

Troubleshooting:



10-2-5. Water leaking

Troubleshooting:

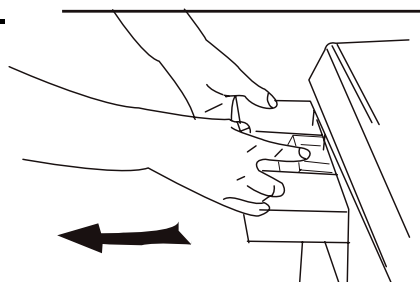


Chapter 11 Maintenance

1. Turn off the water tap and pull out electricity plug after each wash. Open the porthole to prevent formation of moisture and odors. If the washing machine is left idle for a long period, drain the water in the machine and replace the drainage hose.

2. Unplug the machine during cleaning and maintenance. Use a soft cloth dampened with soap liquid to clean the machine case and rubber components. Do not use organic chemicals or corrosive solvents.

3. Clean the detergent distribution drawer regularly. Swing out the drawer, flush it clean with water and then replace it.

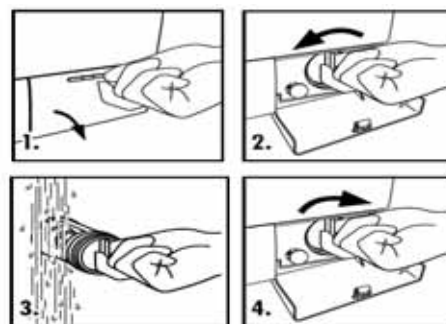


4. Clean the filter Cleaning methods (once a month)

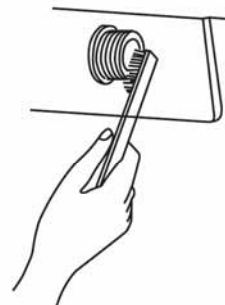
- 1) Push out the outer cover (Fig. 1);
- 2) Screw out filter by turning counterclockwise (Fig. 2);
- 3) Flush clean with running water;
- 4) Replace the filter by turning clockwise and remount the cover (Fig. 3).

Caution: Turn the filter clockwise until it is in the place after the drain pump is cleaned.

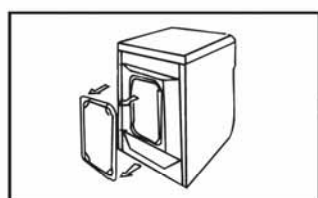
The filter must be in place, or it may lead to leakage.



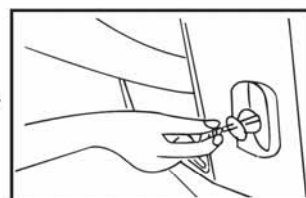
5. To prevent blockage to the water supply by ingress of foreign substances, clean the water inlet and inlet filter regularly.



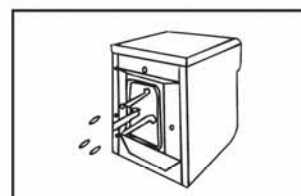
6. If the machine is to be moved to a distant place, replace the vibration absorbing locks (packing screws, rubber gaskets) removed before installation to prevent damage as shown below.



Remove the back cover and take out the three rubber plugs.



Insert the channel steel vibration locks.

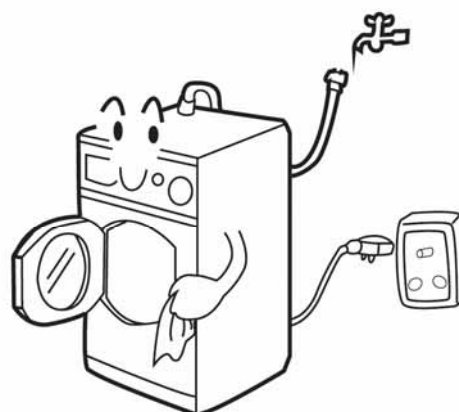


Insert the rubber bolt gaskets.



Replace the back cover.

7. If the washing machine is left idle for a long period, pull out the electrical plug and turn off the water tap. Open the door to prevent formation of moisture and odors. Let the door open while not used.



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